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Induction Coupling for Braking Roller Drive on the Lay-flat Equipment

Claims

1. Lay-flat equipment (1) for films or tubular films (6) extruded by blown film extrusion installations (1),
 - said installation (1) comprising at least one roller (16),
 - which (16) guides the walls of the film or of the tubular film (16) [sic: 6]
 - wherein the lay-flat equipment (1) comprises at least one device (B, 24, 22, 23, 21, 20, 25, 26) for influencing the rotational speed of the roller (16),
 - said device (B, 24, 22, 23, 21, 20, 25, 26) comprising means (9) for providing a torque (B, 24).
 - which (B, 24) can be transferred onto the roller (16) by means of transfer devices (22, 23, 21, 20),

characterized in

transfer devices (22, 23, 21, 20), which allow a slip between the roller (16) and the devices (24) for providing a torque.

2. Lay-flat equipment (1) according to claim 1

characterized in that

the transfer devices (22, 23, 21, 20) comprise a coupling (25), using which the roller (16) and the means (24) for providing a torque can be separated.

3. Lay-flat equipment (1) according to any of the preceding claims

characterized in that

the transfer devices (20-23) comprise a location (21), at which the torque is transferred using a force-fit connection.

4. Lay-flat equipment (1) according to the preceding claim

characterized in that

the force-fit connection comprises at least one of the following characteristics:

- a hydraulic coupling
- a friction coupling.

5. Lay-flat equipment (1) according to any of the claims 2 to 4

characterized in that

the force-fit connection contains at least one magnet (34, 35).

6. Lay-flat equipment (1) according to any of the claims 2 to 5

characterized in that

- first force flow surfaces (37) are assigned to the roller (16) and second force flow surfaces (36) are assigned to the means for providing a torque (B, 24),
- said force flow surfaces (36, 37) being turned towards one another and
- which (36, 37) define the force-fit connection (27),
- wherein the surface of the opposite overlap of the first and second force flow surfaces (36, 37) defines the amount of the maximum torque transmission and
- wherein the surface of the opposite overlap of the first and second force flow surfaces (36, 37) can be changed by a relative movement of the first and second force flow surfaces (36, 37).

7. Lay-flat equipment (1) according to any of the preceding claims

characterized in that

several transfer devices (20-23) are provided.

8. Lay-flat equipment (1) according to claim 7, referred back to claim 6

characterized in that

the surface of the opposite overlap of the first and the second force flow surfaces (36, 37) of the transfer devices of several rollers (16) can be changed by a common relative movement of the first and second force flow surfaces (36, 37) of these rollers (16).

9. Lay-flat equipment (1) according to any of the preceding claims

characterized in that a transfer device (20-23) transfers torque to several rollers

(16).

10. Lay-flat equipment (1) according to any of the claims 5 to 9

characterized in

- a force-fit connection (27), which contains at least one electromagnet (35),
- which (35) is connected to a power controller (32) using which the current intensity in the coils of the electromagnet (35) and thus the field intensity generated by the electromagnet (35) can be changed.